



**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

**[EPA-R05-OAR-2018-0384; FRL-9987-72-Region 5]**

**Air Plan Approval; Ohio; Revisions to Particulate Matter Rules**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve assorted revisions to Ohio's particulate matter rules that the state requested EPA approve into the Ohio State Implementation Plan (SIP) under the Clean Air Act. One set of revisions address sources subject to a requirement for continuous opacity monitoring for which such monitoring is unreliable. The revisions add two alternatives; one alternative requires the source to conduct continuous emission monitoring, and the other alternative subjects the source to an alternative monitoring plan assessing compliance with limits specified for alternative parameters. Other revisions in the rule remove provisions for facilities that have shut down and make nonsubstantive revisions to the language of the rules.

**DATES:** Comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R05-OAR-2018-0384 at <http://www.regulations.gov>, or via

email to [aburano.douglas@epa.gov](mailto:aburano.douglas@epa.gov). For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the "For Further Information Contact" section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

**FOR FURTHER INFORMATION CONTACT:** John Summerhays, Environmental Scientist, Attainment Planning and Maintenance, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886-6067, [summerhays.john@epa.gov](mailto:summerhays.john@epa.gov).

**SUPPLEMENTARY INFORMATION:** This supplementary information section is arranged as follows:

- I. History of Submittal
- II. Review of Alternatives to Continuous Opacity Monitoring
- III. Review of Other Rule Revisions
- IV. What Action is EPA Taking?
- V. Incorporation by Reference
- VI. Statutory and Executive Order Reviews

**I. History of Submittal**

The Ohio Environmental Protection Agency (Ohio<sup>1</sup>) is subject to requirements to review each of its regulations every five years, to assess whether any updates to the regulations are warranted and for other purposes. Accordingly, Ohio reviewed its regulations in Ohio Administrative Code (OAC) Chapter 3745-17, entitled "Particulate Matter Standards," and adopted various revisions amending and updating these rules. Ohio then requested that EPA approve these revisions into the SIP, with exceptions discussed below, in a submittal dated June 1, 2018, along with an amended request submitted August 9, 2018.

As a result of its review, Ohio concluded that rule revisions were needed to address facilities subject to requirements for continuous opacity monitoring for which such

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<sup>1</sup> To avoid confusion, this notice uses the term "Ohio" as shorthand for the Ohio Environmental Protection Agency and the term "EPA" as shorthand for the United States Environmental Protection Agency.

monitoring does not provide reliable determinations of opacity. This concern especially applies to power plants that have installed wet flue gas desulfurization equipment. While power plants are generally required under OAC 3745-17-03(C) to implement continuous opacity monitoring, in accordance with requirements in Title 40 Code of Federal Regulations part 51, appendix P (40 CFR part 51, appendix P), plants with wet flue gas desulfurization equipment in some cases have water vapor in the flue gas that can render continuous opacity measurements unreliable.

To address this concern, Ohio revised its rules to offer two alternatives for plants subject to requirements for continuous opacity monitoring for which such monitoring is unreliable. The first alternative is to conduct continuous emissions monitoring. The second alternative is to conduct monitoring of operational parameters that are identified as suitable for determining compliance with particulate emission limitations. Further description of these alternatives and the requirements that Ohio adopted in association with these requirements are described in the following section.

Ohio's June 1, 2018 submittal only requested approval of the second of these alternatives. However, on August 9, 2018, Ohio revised its request to ask that EPA approve both alternatives. Accordingly, this rulemaking addresses both

alternatives.

A second set of revisions Ohio made to its rules was to clarify that appliances for residential wood combustion are not subject to the limitations in Ohio's particulate matter regulations. A third set of revisions removed provisions that are no longer necessary because the affected facility has shut down. A final set of revisions modified the wording of selected text to reflect new semantic preferences.

Previous revisions to the rules in OAC Chapter 3745-17 provided a category of power plants operating continuous opacity monitoring systems the option to demonstrate compliance with an alternate set of opacity limits. Ohio requested approval of those revisions on June 4, 2003, but EPA proposed to disapprove those revisions on June 27, 2005, at 70 FR 36901. Subsequently, on September 5, 2014, Ohio withdrew its submittal of these revisions. While these provisions remain part of OAC 3745-17-03, Ohio's June 1, 2018 submittal clarifies that the state is not requesting EPA action on these provisions.

## **II. Review of Alternatives to Continuous Opacity Monitoring**

As noted above, the existing Ohio SIP includes provisions that, in accordance with 40 CFR part 51, appendix P, facilities meeting the criteria of appendix P, notably including most power plants, must operate continuous opacity monitoring systems. However, the installation of wet flue gas desulfurization

control equipment on power plants commonly increases the quantity of water vapor within the stack, which in some cases has rendered the continuous opacity monitoring unreliable. This problem has led to consideration of alternative approaches for providing continuous monitoring of whether particulate matter emission controls are operating properly.

Limits on opacity complement limits on particulate mass emissions in assuring that the particulate matter emission controls that are part of the plan for attaining particulate matter air quality standards are operating properly. Stack tests provide a more direct measure of the quantitative efficiency of the control of particulate matter mass, at least with respect to filterable particulate matter (since most limits and therefore most stack tests do not measure condensable particulate matter). On the other hand, opacity observations generally provide a more convenient and less costly measure of particulate matter control, which when done by human observers (in accordance with Method 9) are designed to address condensable as well as filterable particulate matter. Opacity monitoring can also readily be conducted continuously using in-stack monitoring equipment. Therefore, EPA promulgated appendix P to provide for continuous opacity monitoring, most notably for power plants, to provide more continuous evidence as to whether the affected sources are controlling their particulate matter

emissions appropriately. The primary criterion of this rulemaking, then, is whether any alternative monitoring that becomes authorized under this rule for any facility provides an appropriate continuous assessment of the effectiveness of particulate matter emission control that is comparable to the continuous assessment that EPA sought to achieve by promulgating appendix P.

The first alternative that Ohio incorporated into OAC 3745-17-03 was continuous monitoring of the mass of particulate emissions. As specified in OAC 3745-17-03(D), such monitoring is to be conducted in accordance with EPA's Performance Specification 11, as given in 40 CFR part 60, appendix B. Facilities seeking to use this alternative in lieu of continuous opacity monitoring must request permission from Ohio and from EPA. Facilities authorized to use this alternative must comply with a limit of 0.03 pounds of particulate matter per million British Thermal Units (lbs/MMBTU) on a 24-hour average basis (based on an average of all hourly average emission rates over a calendar day period) as well as any other limit in OAC Chapter 3745-17 to which the facility is subject. OAC 3745-17-03(D) authorizes changes in routine monitoring of pertinent sources but does not relax any limits to which an affected source is subject. Notably, opacity in excess of the 20 percent limit in the SIP that is observed through Method 9 remains a violation of

the SIP, in a manner that is unaffected by OAC 3745-17-03(D) or its prospective usage in specific cases. Thus, for example, cases involving substantial emissions of condensable particulate matter sufficient to cause violation of the 20 percent opacity limit would still be grounds for enforcement action, independent of whether any filterable particulate matter emission measurements have been made.

Continuous emissions monitoring by its nature provides continuous information on how well the source is controlling particulate matter emissions as continuous opacity monitoring. Given the mass and opacity limits that apply, EPA believes that the two approaches provide comparable measures of how well the source is controlling particulate matter emissions. OAC 3745-17-03(D) provides that Ohio and EPA will review the situation for each facility on a case-by-case basis to assure that use of continuous emission monitoring in lieu of continuous opacity monitoring is warranted. For these reasons, EPA believes that OAC 3745-17-03(D) provides a suitable alternative means for facilities in appropriate cases to assess the adequacy of particulate matter emission control in lieu of continuous opacity monitoring.

The second alternative to continuous opacity monitoring provided in OAC 3745-17-03 is the continuous monitoring of operational parameters. For example, in selected cases, EPA



accepts baghouse leak detection systems as a suitable alternative to continuous opacity monitoring. Under OAC 3745-17-03(E), facilities seeking to conduct parameter monitoring in lieu of continuous opacity monitoring must submit a request that includes a proposed monitoring plan. This plan must specify the parameters to be monitored, the parameters must be indicative of whether the facility is complying with the applicable mass and opacity limitations to which the facility is subject, and the plan must specify the acceptable range of values of the parameters that are to be required to be met. OAC 3745-17-03(E) states that parameter values outside the range specified as indicative of compliance shall constitute a federally enforceable violation of facility control requirements. Upon approval by Ohio and EPA, the facility is then subject to this monitoring plan in lieu of being required to conduct continuous opacity monitoring.

As with OAC 3745-17-03(D), OAC 3745-17-03(E) does not relax any limits to which the source is subject. For example, observations using Method 9 indicating a violation of the 20 percent opacity limit in the SIP would remain grounds by which a source with excessive particulate matter emissions (whether filterable particulate matter or condensable particulate matter or both) could be identified and subject to enforcement action as violating opacity limits. In a limited number of cases, the

monitoring of the operations of a facility and its control equipment (e.g. the monitoring of whether any bags in a baghouse are leaking) can provide a comparable measure of whether particulate matter emissions are being appropriately controlled as a more direct measurement of opacity or particulate matter mass. OAC 3745-17-03(E) authorizes the use of such parameter monitoring in lieu of continuous opacity monitoring, in the subset of these cases "where the use of a [continuous opacity monitoring system] would not provide accurate determinations of opacity." Under these circumstances, EPA believes that OAC 3745-17-03(E) provides a suitably constrained opportunity for facilities to conduct parameter monitoring in lieu of opacity monitoring. OAC 3745-17-03(E) requires the approval of both Ohio and EPA, and the rule stipulates that the parameter monitoring is to be a reliable indicator of whether the facility is complying with applicable limits. That is, EPA views this alternative as being available only in facility-specific circumstances where continuous opacity monitoring is unreliable and where parameter monitoring provides reliable, continuous assessment of control effectiveness comparable to the level of compliance monitoring that EPA intended by promulgating appendix P. For this subset of facilities, EPA believes that parameter monitoring can provide a suitable alternative approach to continuous compliance monitoring.

### **III. Review of Other Rule Revisions**

As summarized above, Ohio's revisions to OAC Chapter 3745-17, besides the addition of alternatives to continuous opacity monitoring discussed in the previous section, include clarification that OAC Chapter 3745-17 rules do not regulate residential wood combustion, removal of provisions that pertain to facilities that have shut down, and modification of wording for phrases that Ohio wishes to rephrase.

Chapter 3745-17 includes 11 rules, extending from 3745-17-01 to 3745-17-14 but not including adopted but now rescinded rules numbered 3745-17-02, 3745-17-05, or 3745-17-06. Ohio revised all 11 of these remaining rules.

Rule 3745-17-02, entitled "Air Quality Standards," was previously moved to OAC Chapter 3745-25 for consolidation with air quality standards for other pollutants. EPA approved the moved rule, in OAC 3745-25-02, in an action published on October 26, 2010, at 75 FR 65572, but EPA did not approve the rescission of OAC 3745-17-02. Therefore, EPA is proposing to approve the rescission of OAC 3745-17-02 as part of this action. OAC 3745-17-05 and 3745-17-06 have already been rescinded from the SIP.

The following discussion reviews each rule's revisions individually.

- 3745-17-01, "Definitions" - The primary revisions to OAC 3745-17-01 are to add definitions of various terms pertaining to

residential wood combustion, including central heater, chip wood fuel, fireplace, pellet fuel, pellet stove, residential force air furnace, residential hydronic heater, residential masonry heater, residential wood burning appliance, and wood heater. These definitions are sensible definitions that clearly establish appropriate categories of sources for use in other regulations. The appropriateness of the regulatory provisions in other rules based on these definitions is reviewed as part of the review of the other rules. This rule also includes reasonable additions to the reference material that is used in evaluating compliance with the provisions of OAC Chapter 3745-17.

- 3745-17-03 - "Measurement Methods and Procedures" - The primary revisions in this rule are the addition of the two alternatives to compliance with requirements for continuous opacity monitoring. These revisions were reviewed in the prior section of this preamble.

While Ohio requested approval of most of OAC 3745-17-03, Ohio expressly excluded two elements of OAC 3745-17-03 from this request. One of these elements, in OAC 3745-17-03(B)(1)(b), offers an alternate opacity limit (in brief, authorizing 1.1 percent of nonexempt 6-minute opacity values to exceed 20 percent opacity) for power plants operating continuous opacity monitoring systems. The second, associated element is the

phrase in OAC 3745-17-03(B)(1)(a) stating "Except as provided in paragraph (B)(1)(b) of this rule". These are provisions that Ohio submitted on June 4, 2003, that EPA proposed to disapprove on June 27, 2005, and that Ohio withdrew from consideration on September 5, 2014. Accordingly, EPA is proposing to act on most of OAC 3745-17-03, notably including paragraphs 3745-17-03(D) and (E), but EPA is proposing not to act on subparagraph 3745-17-03(B)(1)(b) and the specified phrase in 3745-17-03(B)(1)(a).

Revised OAC 3745-17-03 modifies the reference method for measuring opacity, which previously only identified Method 9 (in 40 CFR 60 appendix A), to include "USEPA method 9 or continuous opacity monitoring as specified in paragraph (C) of this rule." These two methods make different measurements, notably insofar as Method 9 involves human observations which consider the effect of condensable particulate matter (i.e., material that is in gaseous form in the stack but condenses into solid form after leaving the stack), whereas in-stack continuous opacity monitoring does not. The in-stack continuous opacity monitoring will understate opacity (and understate this indicator or particulate emissions) to the extent that it excludes condensable particulate matter, but EPA generally considers suitable continuous opacity monitoring indicating noncompliance to be actionable basis for concluding that particulate matter emission control is inadequate. EPA understands the revised

rule to provide that measurements by either method that indicate a violation of opacity limits shall constitute evidence of noncompliance, regardless of whether data based on the other method are available or whether data based on the other method indicate compliance.

Revised OAC 3745-17-03 also contains a small number of editorial revisions, for example converting singular/plural constructions to the plural (e.g., converting "charge(s)" to "charges") and removing selected unnecessary text (simplifying "in accordance with the requirements of 'USEPA Performance Specification 1'" to "in accordance with 'USEPA Performance Specification 1'"). These editorial revisions yield an equally acceptable regulation.

- 3745-17-04 - "Compliance Time Schedules" - The primary revisions in this rule are the removal of provisions that apply to facilities that have shut down. Ohio also adopted numerous editorial simplifications in this rule, for example to remove the phrase "the requirements of" where this phrase is unnecessary. These revisions do not alter the substantive requirements of this rule, and so the revised rule is approvable.

- 3745-17-07 - "Control of Visible Particulate Emissions from Stationary Sources" - Ohio added residential wood burning appliances and pellet stoves as explicitly exempted from the

opacity limits in this rule. This rule had already exempted sources that are not subject to mass emission limits in specified other rules. Residential wood burning appliances and pellet stoves are not subject to the mass emission limits in the specified other rules, and so these sources were already exempt from the opacity limits of OAC 3745-17-07. Thus, the addition of an explicit exemption for these sources does not relax the requirements of the SIP, and instead merely clarifies that these sources are exempt from the opacity limits of OAC 3745-17-07.

Ohio also removed source-specific opacity limits for sources that have shut down, and Ohio made editorial revisions similar to those discussed above. These revisions are approvable.

- 3745-17-08 - "Restriction of Emission of Fugitive Dust" - The primary revisions in this rule are the removal of provisions that applied only to sources that have now shut down and editorial revisions similar to those discussed above. Also, for sources that are to apply for a permit to address nuisances, Ohio revised OAC 3745-17-08 to reflect revised permitting procedures implemented in other Ohio rules since OAC Chapter 3745-17 was last revised. Finally, Ohio added maps to illustrate the areas that are subject to long-standing requirements for reasonably available control measures. These revisions result in an equally protective set of rules and are

approvable.

- 3745-17-09 - "Restrictions on Particulate Emissions and Odors from Incinerators" - Ohio reformatted the text of this regulation but made no substantive changes. These revisions are approvable.

- 3745-17-10 - "Restrictions on Particulate Emissions from Fuel-burning Equipment" - Ohio removed provisions that are moot due to shutdown of an affected facility, and Ohio made editorial revisions similar to those discussed above. These revisions are approvable.

- 3745-17-11 - "Restrictions on Particulate Emissions from Industrial Processes" - Ohio added a handful of clarifications to this rule. OAC 3745-17-11 is Ohio's process weight rule, i.e. a rule that imposes limits that are a function of the weight of materials that a facility processes. The rule has special provisions for surface coating operations; Ohio amended the text to clarify that only surface coaters that are exempt based on usage of less than five gallons of coatings per day must keep records on coatings usage; Ohio also amended this provision to require that such sources also keep records of coating method. Ohio codified long-standing policy that the process weight used in determining the limit under this rule does not include "liquid and gaseous fuels when they are used solely as fuels and combustion air." Ohio further made assorted



editorial and correcting amendments, such as correcting a source's address. These revisions result in an equally protective set of rules and are approvable.

- 3745-17-12 - "Additional Restrictions on Particulate Emissions from Specific Air Contaminant Sources in Cuyahoga County" - Most of the revisions to this rule are to remove provisions that are moot due to shutdown of the affected source. Ohio also updated the names of companies in applicable cases. These revisions have no substantive effect on the requirements of the rule and are approvable.

- 3745-17-13 - "Additional Restrictions on Particulate Emissions from Specific Air Contaminant Sources in Jefferson County" - As with OAC 3745-17-12, the revisions to OAC 3745-17-13 remove the provisions that apply to sources that no longer operate and update the names of affected companies where appropriate. These revisions have no substantive effect on the requirements of the rule and are approvable.

- 3745-17-14 - "Contingency Plan Requirements for Cuyahoga and Jefferson Counties" - The primary revisions to this rule are to remove companies that are no longer operating. Ohio also made editorial revisions similar to those discussed above. These revisions are approvable.

#### **IV. What Action is EPA Taking?**

EPA is proposing to approve the rules in OAC 3745-17 that

Ohio requested be approved. A full listing of the rules that EPA is proposing to approve is provided in Table 1. EPA is proposing to approve the entirety of all of these rules except for OAC 3745-17-03, for which Ohio's request excluded specified sections. In addition, EPA is proposing to remove OAC 3745-17-02, which Ohio has rescinded and the substance of which has been recodified (and approved into the SIP) within OAC 3745-25-02.

Table 1. OAC 3745-17 "Particulate Matter Standards," effective January 20, 2018.

Rule Number	Rule Title	Portion Proposed for Approval
3745-17-01	Definitions	Entirety
3745-17-03	Measurement Methods and Procedures	All except paragraph (B) (1) (b) and the reference to that paragraph in paragraph (B) (1) (a)
3745-17-04	Compliance Time Schedules	Entirety
3745-17-07	Control of Visible Particulate Emissions from Stationary Sources	Entirety
3745-17-08	Restriction of Emission of Fugitive Dust	Entirety
3745-17-09	Restrictions on Particulate Emissions and Odors from Incinerators	Entirety
3745-17-10	Restrictions on Particulate Emissions from Fuel-burning Equipment	Entirety
3745-17-11	Restrictions on Particulate Emissions from Industrial Processes	Entirety
3745-17-12	Additional Restrictions on Particulate Emissions from Specific Air Contaminant Sources in Cuyahoga County	Entirety
3745-17-13	Additional Restrictions on Particulate Emissions from Specific Air Contaminant Sources in Jefferson County	Entirety
3745-17-14	Contingency Plan Requirements for Cuyahoga and Jefferson Counties	Entirety

## V. Incorporation by Reference

In this document, EPA is proposing to include in a final

EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference the Ohio particulate matter rules discussed in section IV. "What Action is EPA Taking?" of this preamble. EPA has made, and will continue to make, these documents generally available through [www.regulations.gov](http://www.regulations.gov) and at the EPA Region 5 Office (please contact the person identified in the "For Further Information Contact" section of this preamble for more information).

## **VI. Statutory and Executive Order Reviews**

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Clean Air Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2,

2017) regulatory action because SIP approvals are exempted under Executive Order 12866;

- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
  - Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
  - Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
  - Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
  - Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
  - Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
  - Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act;
- and

- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Particulate matter, Reporting and recordkeeping requirements.

Dated: November 27, 2018.

Cathy Stepp,  
Regional Administrator, Region 5.

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